# Lake Erie Harmful Algal Bloom Bulletin

**25 July, 2019, Bulletin 08**

**Analysis**

The *Microcystis* cyanobacteria bloom continues in the western basin of Lake Erie. MODIS imagery from 7/24 shows the bloom is most dense outside Maumee Bay and north along the Michigan coast past Brest Bay; extending along the Ohio coast to Magee Wildlife Marsh and offshore to West Sister Island. Observed winds (7/24) promoted scum formation which has been intermittently observed offshore the Ohio coast. Measured toxin concentrations are below recreational thresholds throughout most of the bloom extent, but exceed the threshold where the bloom is most dense (appearing green from a boat). *Keep pets and yourself out of the water in areas where scum is forming*. The persistent cyanobacteria bloom in Sandusky Bay continues. No other blooms are present in Lake Erie.

**Forecasts**

Winds (2-19 kn) forecast today through Monday (7/25-29) may promote periods of mixing and eastern transport of surface *Microcystis* concentrations. –Keeney, Jima

**Additional Resources**

To find a safe place for recreation, visit the Ohio DOH "BeachGuard" site: *http://publicapps.odh.ohio.gov/beachguardpublic/*
Ohio EPA's site on harmful algal blooms: *http://epa.ohio.gov/HAB-Algae*
NOAA's GLERL provides additional HAB data here: *http://www.glerl.noaa.gov/res/HABs_and_Hypoxia*

**The images below are "GeoPDF". Please visit https://go.usa.gov/xReTC for instructions on viewing longitude and latitude.**

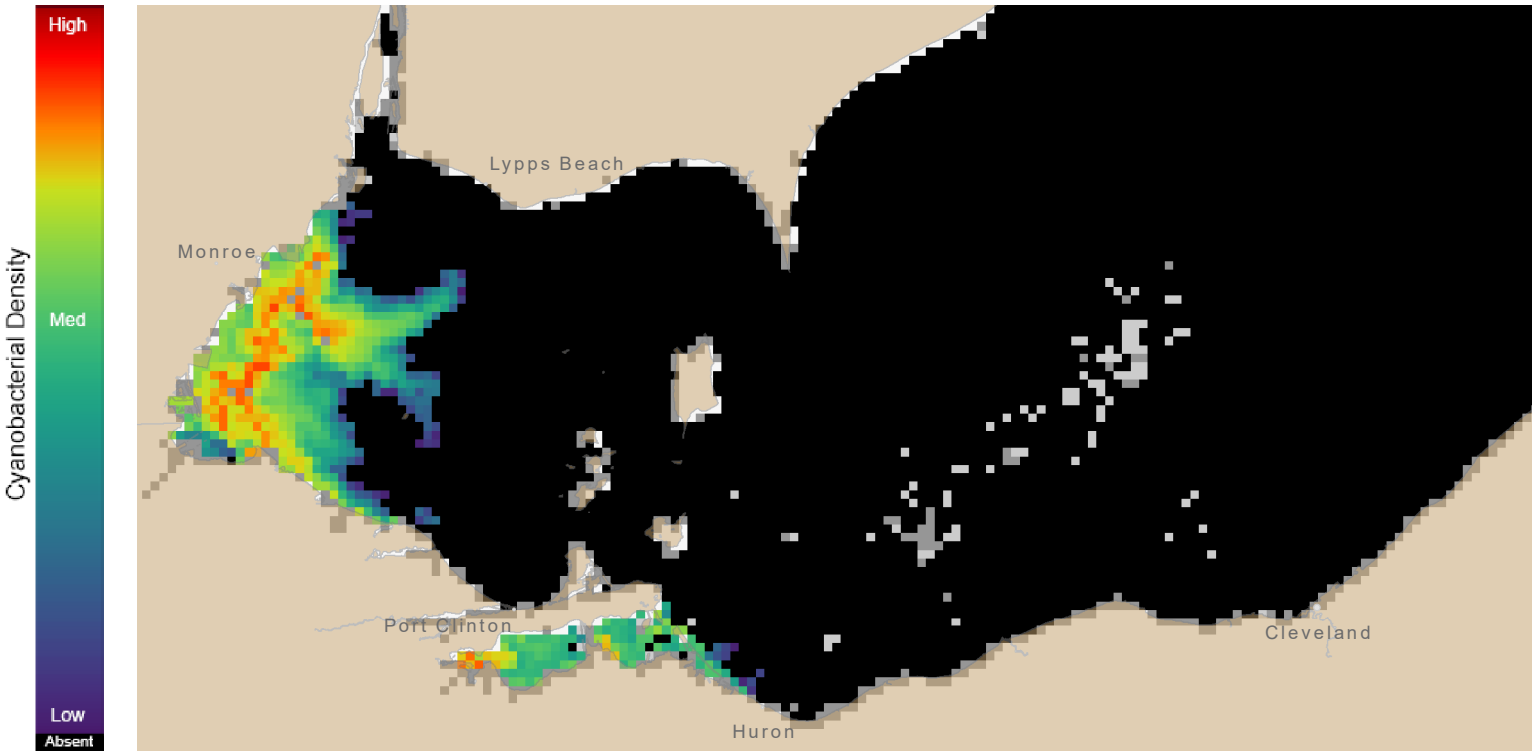



Figure 1. Cyanobacterial Index from NASA MODIS-Terra & Aqua data collected 24 July, 2019 at 12:19 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.

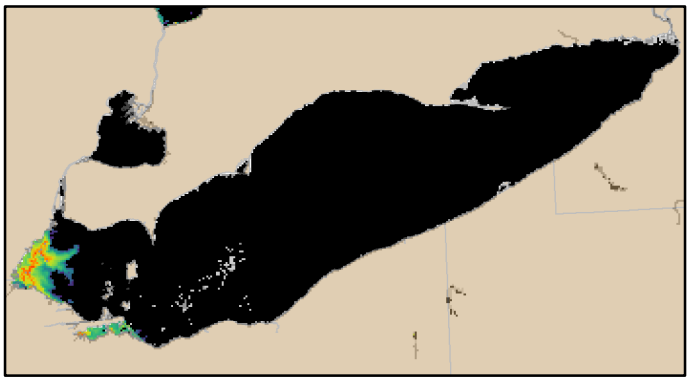
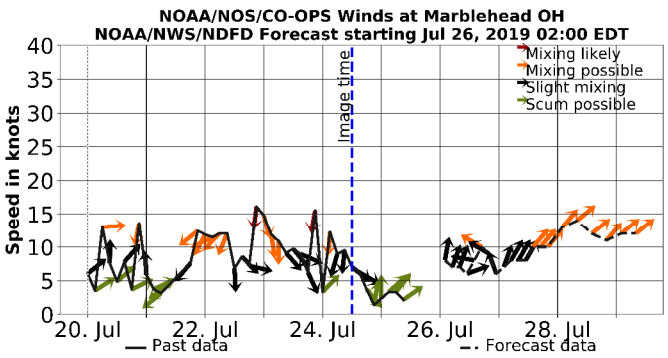


Figure 2. Cyanobacterial Index from NASA MODIS-Terra & Aqua data collected 24 July, 2019 at 12:19.




Wind speed and direction from Marblehead, OH. Blooms mix through the water column at wind speeds greater than 15 knots (or 7.7 m/s).

*For more information and to subscribe to this bulletin, go to: https://tidesandcurrents.noaa.gov/hab/lakeerie.html*

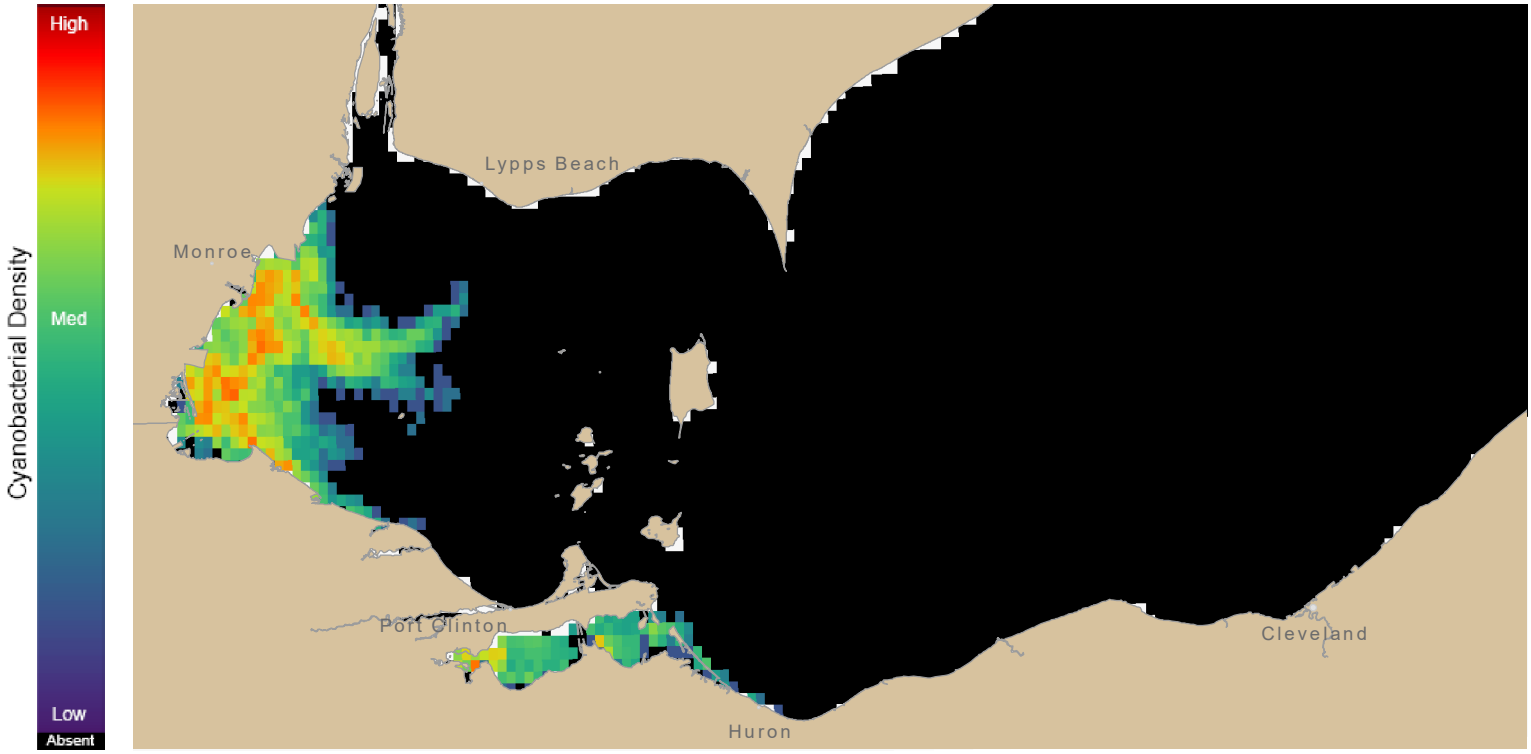



Figure 3. Nowcast position of bloom for 25 July, 2019 using LEOFS modelled currents to move the bloom from the 24 July, 2019 image.

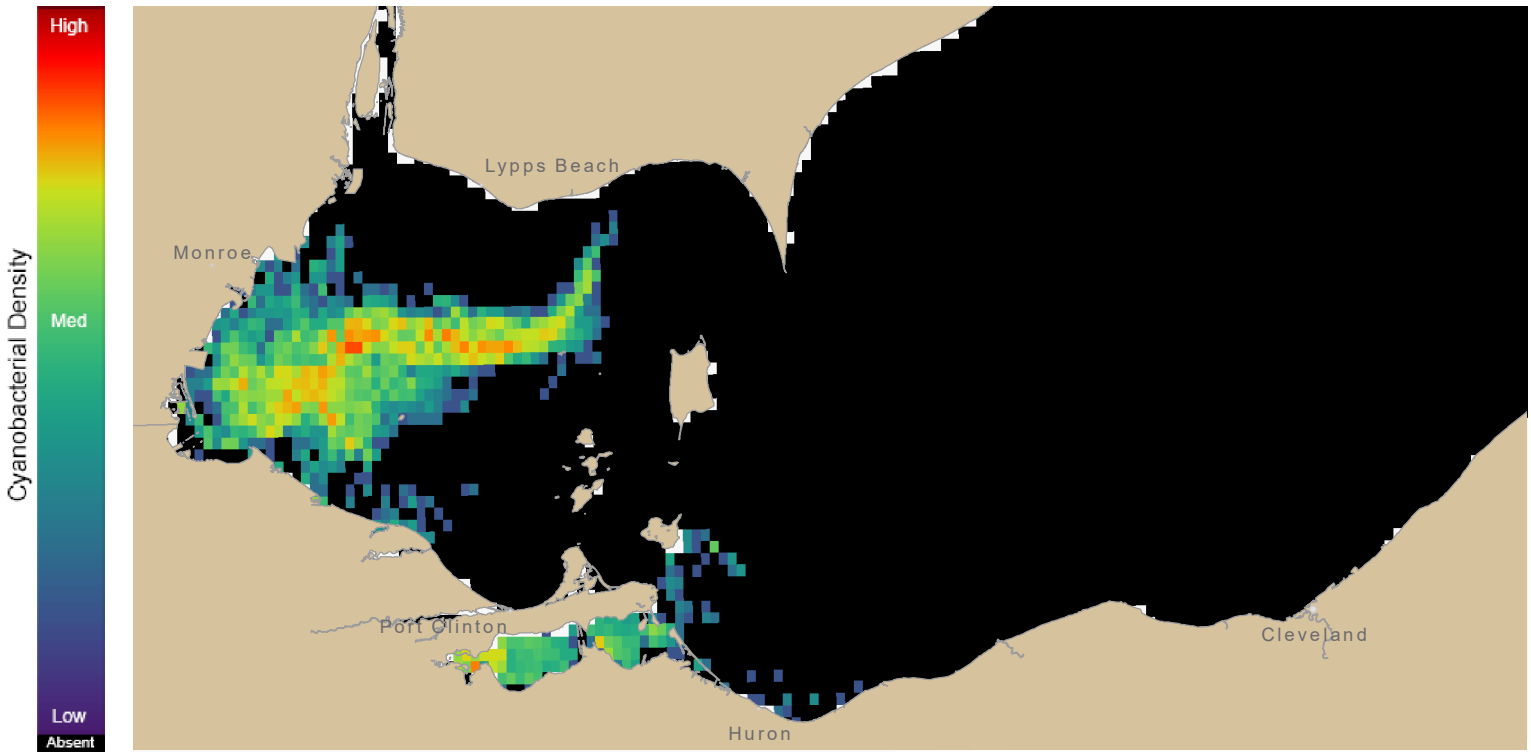
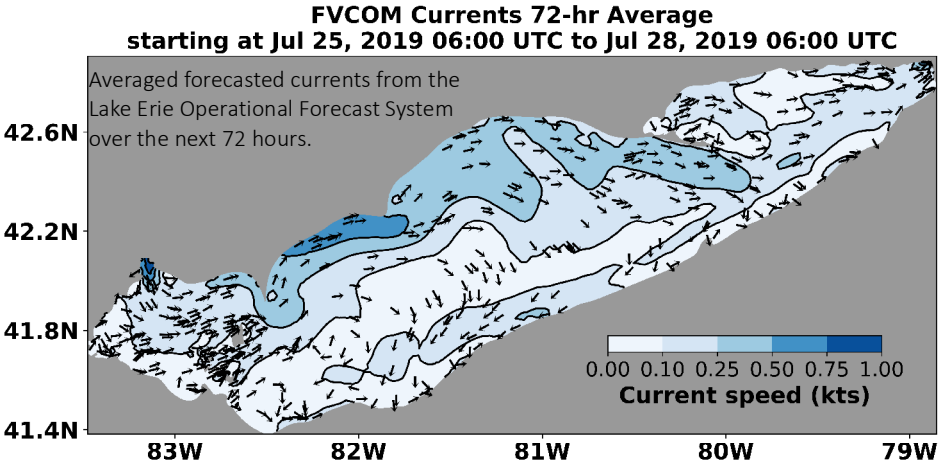



Figure 4. Forecast position of bloom for 28 July, 2019 using LEOFS modelled currents to move the bloom from the 24 July, 2019 image.




*For more information and to subscribe, please visit the NOAA HAB Forecast page: https://tidesandcurrents.noaa.gov/hab/lakeerie.html*